

# 10.0 Summary of Mitigation

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*The US Highway 53 Virginia to Eveleth Draft Environmental Impact Statement (EIS) (December 2014) is incorporated by reference and is considered part of the Final EIS.*

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This Final EIS has described the transportation, social, natural, and physical environmental impacts associated with the construction and operation of the preferred alternative for US 53 Virginia to Eveleth project. The effects of the preferred alternative, which includes the Interchange Option and Straight Option from the Draft EIS, were evaluated comparatively across a range of subject areas related to the built and natural environment. The identified impacts include:

- Right-of-way: 203.1 acres needed for new right-of-way affecting 13 parcels; including five total parcel acquisitions, three of which require commercial relocations
  - 6.4 acres of temporary easements required on four parcels
- Recreational Lands: Mesabi Trail and snowmobile trail will be realigned, creating new crossing points
- Section 4(f): 5.7 acres of the west edge of the OHVRA are required for right-of-way
- Water Supply and Waterbody Modification: Potential for runoff and sedimentation due to construction; and potential for spills
- Wetlands: 15.49 acres of wetland will be filled, 9.96 acres of which are regulated and require replacement
  - Temporary impacts will be restored after construction is completed
- Water Quality: Impervious surface increase of approximately three acres
- Geology and Soils: Construction erosion potential
- Noise: Two areas exceed noise standards and meet reasonable and feasible criteria for noise barriers
- Vegetation: 39.0 acres of wooded land removed
- Migratory Birds: Potential for peregrine falcon and swallow nests on existing pit walls and bridges to be removed
- Northern Long-Eared Bat: Presence during summer roosting; hibernacula identified outside corridor
- Contamination: Three known contamination sites in/near corridor
- Geotechnical: Known shale layer in future isthmus
- Construction:
  - Business impacts during construction
  - Utility relocation/temporary interruptions in service
  - Noise due to construction activities
  - Increased dust and airborne particles during construction
  - Excess material produced during construction
  - Temporary earthbound vibrations
  - Potential erosion and runoff

**Table 10.0-1. Status of Permits and Approvals**

Agency	Permit/Approval	Status
<b>Federal</b>		
Federal Highway Administration	EIS Record of Decision	September 2015
	Section 4(f) Determinations	De minimis determination with Record of Decision (ROD)
	Section 106 Cultural Resources Determinations	Complete
	Section 7 of the Endangered Species Act Determination	Complete
US Army Corps of Engineers	Section 404 Permit (fill in US Waters)	Submitted replacement plan June 29, 2015
<b>State</b>		
Minnesota Department of Transportation	EIS Adequacy Determination	September 2015
	Wetland Conservation Act (WCA) Approvals	Submitted replacement plan July 10, 2015; approval after ROD
Minnesota Department of Natural Resources	Water Appropriation Permit, if needed	To be submitted by contractor
Minnesota Pollution Control Agency	National Pollution Discharge Elimination System (NPDES) Construction Stormwater Permit	To be submitted by contractor
	Section 401 Water Quality Certification	Submitted July 10, 2015; approval after ROD
<b>Local</b>		
City of Virginia	Municipal approval of roadway plans	Hearing March 24, 2015; approval on April 28, 2015

**Table 10.0-2** summarizes the mitigation commitments made in the Final EIS for the identified impacts.

**Table 10.0-2. Mitigation Measures for the Preferred Alternative**

Issue Area	Identified Impact	Mitigation Measures
<b>Right-of-Way</b>	<ul style="list-style-type: none"> <li>■ 203.1 acres needed for new right-of-way affecting 13 parcels</li> <li>■ Includes five total parcel acquisitions, three of which require commercial relocations</li> <li>■ 6.4 acres of temporary easements required on four parcels</li> <li>■ Mineral rights also need to be compensated</li> </ul>	<ul style="list-style-type: none"> <li>■ Compensate landowners via Federal Uniform Relocation Act</li> <li>■ Acquire permanent easement or ownership of mineral and surface rights to reduce relocation risk</li> <li>■ If a contractor chooses to pursue temporary easements for staging areas not identified in the Final EIS, standard erosion control and site management BMPs will apply to these areas</li> </ul>

Issue Area	Identified Impact	Mitigation Measures
Recreational Lands	<ul style="list-style-type: none"> <li>Mesabi Trail and snowmobile trail will be realigned, creating new crossing points</li> </ul>	<ul style="list-style-type: none"> <li>To maintain trail connection between Gilbert and Virginia, MnDOT will provide a trail permit on east side of alignment and construct the new connection between Landfill Road and the trail segment within the OHVRA</li> <li>Snowmobile use will be allowed on bridge; MnDOT coordinating with agencies on Eveleth trail connection to be constructed by others</li> </ul>
Section 4(f)	<ul style="list-style-type: none"> <li>5.7 acres of the west edge of the OHVRA are required</li> </ul>	<ul style="list-style-type: none"> <li>OHVRA impact minimized to extent possible</li> </ul>
Visual and Aesthetic Impacts	<ul style="list-style-type: none"> <li>Visual changes with a new corridor and potential noise walls</li> </ul>	<ul style="list-style-type: none"> <li>Visual quality guidelines produced by the Visual Quality Review Committee will be used during the final design process</li> </ul>
Utilities	<ul style="list-style-type: none"> <li>Utilities are not impacted by MnDOT; however, coordination is required with MnDOT regarding removal and relocation</li> </ul>	<ul style="list-style-type: none"> <li>MnDOT will coordinate with utility owners to accommodate some utilities within the new alignment and coordinate alternate utility routes for others</li> </ul>
Water Supply	<ul style="list-style-type: none"> <li>Potential for runoff and sedimentation to the Rouchleau Pit due to construction and spills</li> </ul>	<ul style="list-style-type: none"> <li>Stormwater conveyance/treatment and spill containment provisions</li> <li>Turbidity controls during construction</li> <li>Specifications for the source and nature of any fill material used; prohibiting the use of taconite tailings as fill within the Rouchleau Pit</li> </ul>
Waterbody Modification	<ul style="list-style-type: none"> <li>Fill within the pit for pier construction</li> </ul>	<ul style="list-style-type: none"> <li>Standard erosion control/construction best management practices (BMPs)</li> </ul>
Wetlands	<ul style="list-style-type: none"> <li>15.49 acres of wetland will be impacted by cut or fill, 9.96 acres of which are regulated and require mitigation</li> <li>0.75 acres of wetland will have temporary impacts</li> </ul>	<ul style="list-style-type: none"> <li>9.96 acres of wetland credit to be provided via withdrawal of banked credits per state and federal regulations</li> <li>Temporary impacts will be restored onsite</li> </ul>
Surface Water/ Water Quantity and Quality	<ul style="list-style-type: none"> <li>Potential for runoff to impact water supply and downstream impaired water</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of stormwater BMPs within project area</li> </ul>
Geology and Soils/ Soil Erosion	<ul style="list-style-type: none"> <li>Construction erosion potential</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of erosion control BMPs within project area</li> </ul>

Issue Area	Identified Impact	Mitigation Measures
Noise	<ul style="list-style-type: none"> <li>Two areas exceed noise standards and meet reasonable and feasible criteria for noise walls</li> </ul>	<ul style="list-style-type: none"> <li>A noise wall is preliminarily cost effective at Area C (2nd Avenue)</li> <li>A noise wall is preliminarily cost effective at Area F (Midway)</li> <li>Voting by benefitted receivers has eliminated wall construction at Area C (2nd Avenue)</li> <li>Voting by benefitted receivers has eliminated wall construction at Area F (Midway)</li> </ul>
Vegetation and Cover Types	<ul style="list-style-type: none"> <li>39 acres of wooded land removed</li> </ul>	<ul style="list-style-type: none"> <li>BMPs for control of weeds and invasive species will be followed near sensitive areas</li> <li>Revegetation and stabilization of disturbed areas will occur</li> </ul>
Fish and Wildlife	<ul style="list-style-type: none"> <li>Potential for peregrine falcon nests on existing pit walls near bridge construction</li> </ul>	<ul style="list-style-type: none"> <li>If peregrine falcons are observed during construction, the MnDOT biologist will be contacted for coordination</li> </ul>
Threatened and Endangered Species	<ul style="list-style-type: none"> <li>Northern long-eared bat presence confirmed during summer roosting; hibernacula identified outside corridor</li> </ul>	<ul style="list-style-type: none"> <li>Tree removal to be conducted in winter months (October 1 to April 1)</li> </ul>
Hazardous Materials and Contaminated Properties	<ul style="list-style-type: none"> <li>Known contamination within or near the corridor</li> <li>Some taconite may contain elongated mineral particles (EMP), which has been linked to mesothelioma</li> </ul>	<ul style="list-style-type: none"> <li>MnDOT will prepare a Response Action Plan (RAP) prior to any right-of-way acquisition or construction to address contaminants if encountered</li> <li>Standard BMPs for handling taconite-containing materials and spills will be followed</li> </ul>
Excess Materials	<ul style="list-style-type: none"> <li>Proper disposal or reuse of the existing roadway pavement and the top few feet of roadbed from the terminated easement agreement will be required</li> </ul>	<ul style="list-style-type: none"> <li>If disposal is required for waste materials resulting from demolition, this waste will be disposed of in a MPCA permitted demolition landfill</li> <li>Specifications for the source and nature of any fill material used; prohibiting the use of taconite tailings as fill within the Rouchleau Pit</li> </ul>

Issue Area	Identified Impact	Mitigation Measures
<b>Geotechnical and Earthborne Vibrations</b>	<ul style="list-style-type: none"> <li>■ Bridge piers may be susceptible to vibrations and flyrock from future, nearby mine blasting</li> <li>■ Known shale layer in future isthmus</li> </ul>	<ul style="list-style-type: none"> <li>■ Additional geotechnical investigation and design details will inform BMPs needed to protect road infrastructure</li> <li>■ MnDOT will purchase an area of permanent easement around the bridge that accounts for seismic activity and is large enough to protect the integrity of the structure and roadbed</li> <li>■ Future mining adjacent to right-of-way will require a mitigation plan to be developed by the mine operator for MnDOT approval</li> </ul>
<b>Construction Related Impacts</b>	<ul style="list-style-type: none"> <li>■ Business impacts during highway construction</li> <li>■ Utility removal from corridor by summer of 2016; may require temporary service until bridge and road complete in fall 2017</li> <li>■ Any equipment, materials, or personnel coming into contact with the Rouchleau Pit water due to dewatering or construction may transfer aquatic invasive species (AIS) into the Rouchleau Pit</li> <li>■ Noise due to construction activities</li> <li>■ Increased dust and airborne particles during construction</li> <li>■ Excess material produced during construction</li> <li>■ Temporary earthborne vibrations</li> <li>■ Potential erosion and runoff</li> </ul>	<ul style="list-style-type: none"> <li>■ Manage traffic control to minimize business impacts during construction</li> <li>■ Provide early notice to utility operators and facilitate coordination</li> <li>■ Additional BMPs to prevent any potential transfers of AIS into the water (e.g., having any equipment or material used for dewatering or construction exposed to dry conditions for at least five days before coming into contact with the waterbody)</li> <li>■ Standard MnDOT construction noise practices</li> <li>■ Standard dust control BMPs such as watering will be implemented</li> <li>■ Handling of regulated materials/wastes per management plan, Response Action Plan, demolition plan, and MnDOT Guidance documents</li> <li>■ Disposal of excess material per approved disposal plan</li> <li>■ Vibration monitoring will be used; blasting, when needed, will be scheduled for minimal disruption</li> <li>■ NPDES stormwater permit for construction activity, including BMPs, temporary construction measures, and erosion control plan will be acquired and complied with throughout construction</li> <li>■ Revegetation and stabilization of disturbed areas</li> </ul>